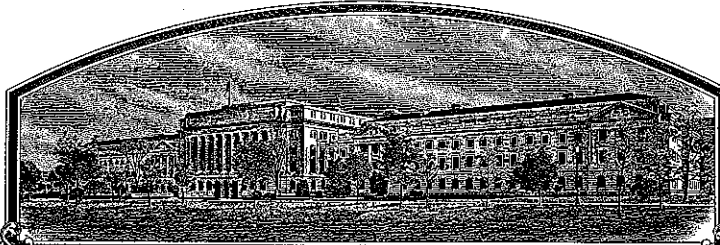


No.

200100124



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Sakata Seed Corporation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED IN THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

VINCA

'Victory Pure White'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of August, in the year two thousand and five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

<p>1. NAME OF OWNER</p> <p>Sakata Seed Corporation</p>		<p>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME</p> <p>Kakegawa EP7</p>		<p>3. VARIETY NAME</p> <p>Victory Pure White Kakegawa EP7</p>	
<p>4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)</p> <p>2-7-1 Nakamachidai Tsuzuki-Ku, Yokohama Japan 24</p>		<p>5. TELEPHONE (include area code)</p> <p>(408) 778-7758</p>		<p>FOR OFFICIAL USE ONLY</p> <p>PVPO NUMBER</p> <p>20010012</p>	
<p>7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)</p> <p>corporation</p>		<p>8. IF INCORPORATED, GIVE STATE OF INCORPORATION</p> <p>Yokohama, Japan</p>		<p>9. DATE OF INCORPORATION</p> <p>Dec. 11, 1942</p>	
<p>10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)</p> <p>Thomas Day or Gary Whiteaker Sakata Seed America, Inc. 18095 Serene Drive Morgan Hill, California 95037 USA</p>				<p>FILING AND EXAMINATION FEES:</p> <p>\$ 2705.00</p> <p>DATE 12/26/00</p> <p>CERTIFICATION FEE:</p> <p>\$ 682.00</p> <p>DATE 7/21/05</p>	
<p>11. TELEPHONE (Include area code)</p> <p>(408) 778-7758</p>		<p>12. FAX (Include area code)</p> <p>(408) 779-1978</p>		<p>13. E-MAIL</p> <p>tday@sakata.com</p>	
<p>14. CROP KIND (Common Name)</p> <p>vinca or Madagascar perwinkle</p>					
<p>18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)</p> <p>a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety</p> <p>b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness</p> <p>c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety</p> <p>d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional)</p> <p>e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership</p> <p>f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)</p> <p>g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)</p>			<p>19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act</p> <p><input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22)</p>		
<p>20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?</p> <p>IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED</p>			<p>21. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS?</p> <p>IF YES, SPECIFY THE NUMBER 1, 2, 3, etc. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED</p> <p>(If additional explanation is necessary, please use the space indicated on the reverse.)</p>		
<p>22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?</p> <p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)</p>			<p>23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?</p> <p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)</p>		
<p>24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.</p> <p>The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.</p> <p>Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.</p>					
<p>SIGNATURE OF OWNER</p> <p>Thomas Day</p>			<p>SIGNATURE OF OWNER</p>		
<p>NAME (Please print or type)</p> <p>Thomas Day</p>			<p>NAME (Please print or type)</p>		
<p>CAPACITY OR TITLE</p> <p>QC and IPR Manager</p>		<p>DATE</p> <p>12/21/00</p>		<p>CAPACITY OR TITLE</p>	
<p>DATE</p>		<p>DATE</p> <p>1</p>			

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,400 (\$300 filing fee and \$2,100 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvp.htm>

200100124

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO
19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.

21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Japan Feb. 1999

Europe May 2000

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

Japan

January 27, 2000

Appl. # 12315

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (2-99) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (6-98) which is obsolete.

Sakata Seed America
Vinca 'Victory Pure White'
PVP Application Number: 200100124

Exhibit A, Breeding History
Revised: August 8, 2002 (THD)

In 1990 the initial cross was made between the new variety's parent lines. Line LM-1, an off-type plant selected from the variety 'Little Blanche', possessed good branching and dwarf plant habit. The variety 'Pretty Pink' possessed larger flowers. In 1990 F₁ and F₂ seed were produced and selections were made from the F₂ generation for short plants with branching habit and large-petaled flowers. The selection 8-2N possessed pure white petal color, round petals, large flowers and a compact habit with good branching. Self-pollination and single plant selection for compact habit and branching, large-petaled, sturdy flowers and attractive petal color continued until 1996 when an F₁₁ generation plant, 8-2N-1D-1B-6A-3A, was selected as 'Kakegawa EP7'.

'Kakegawa EP7' was reproduced and grown out to evaluate uniformity again at the F₁₂ generation. 'Victory Pure White' was uniform and stable for two seed generations. There are no variant or off-type plants inherent in the variety.

200100124

Sakata Seed America
 Vinca 'Victory Pure White'
 PVP Application Number: 200100124

Exhibit B, Distinctness Statement
 Revised: August 8, 2002 (THD)

Based on overall morphology, 'Victory Pure White' is most similar to 'Cooler Coconut' (PanAmerican Seed Company, see http://www.panamseed.com/plant15_page.htm).

'Victory Pure White' most clearly differs from 'Cooler Coconut' in the following traits:

Trait	'Victory Pure White'	'Cooler Coconut'	Evidence
Days to first flower	77 days	50 days	Statistical data below

Days to First Flower Data Analysis

N= 20 plants per variety

Variety	Mean	Std. Dev.	t value	Probability
Victory Pure White	77	3.89	22.74	9.94 E-24
Cooler Coconut	50	3.72		

CONCLUSION

In 2 independent trials at different times, Vinca 'Victory White' was significantly shorter ($p < 0.0001$, $p < 0.0001$) than Vinca 'Cooler Coconut'. The observed difference was uniform, stable and clear in both trials.

MATERIALS AND METHODS

Both trials were conducted at the Sakata Seed America, Inc. research station in Salinas, California. Each trial was a randomized complete block design with variety as the subplot and had three replications. Seed was sown in 392-cell trays and misted until seedlings were hearty enough for transplant into 4-inch pots, usually 4 weeks. Plants were spaced approximately 6 in. apart in order to ensure proper growth and development.

Trial 1 was sown on 13 January 2004 and completed on 14 July 2004 (winter trial). Trial 2 was sown on 16 April 2004 and completed on 15 Aug 2004 (summer trial). The winter trial was longer because of the slow growth exhibited by both varieties due to cold temperatures.

Data on plant height was collected by measuring the distance from the soil line to the top of the foliage. Height data was taken approximately 6 months from sowing for Trial 1, and 4 months from sowing for Trial 2.

Data were analyzed using the Generalized Linear Model Procedure [PROC GLM] in SAS for Windows, v. 8.02 (The SAS Institute, Cary, NC). The effect of variety on the dependent variable 'plant height' was tested using ANOVA.

RESULTS

Data observed were normally distributed. Descriptive statistics from each trial are presented in Tables 1 and 2. ANOVA results from Trials 1 and 2 are presented in Table 3. Raw data from both trials are presented in Table 4. In each trial, variety had a significant impact on plant height ($p < 0.0001$, $p < 0.0001$) (Figure 1, Figure 2). Heights for both varieties were stable across both trials, though the difference in height between the varieties was slightly larger in the second trial.

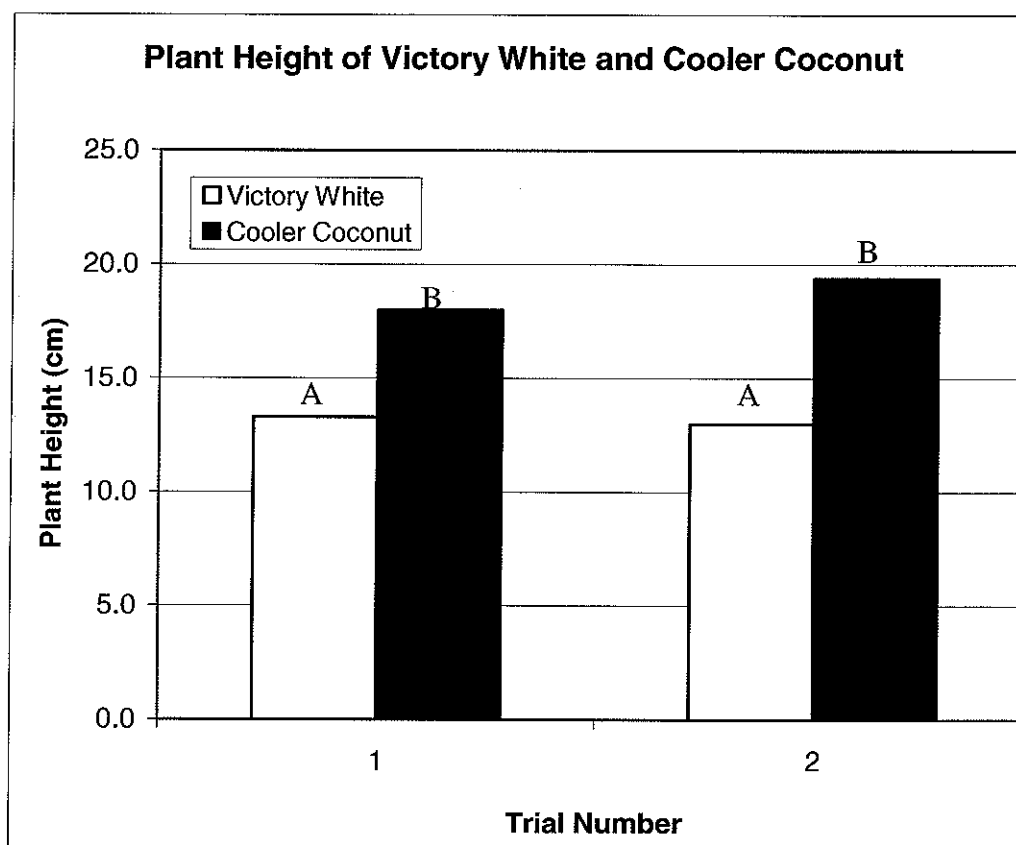


Figure 1. Comparison of plant height of Victory Vinca and Cooler Coconut from Trial 1 and Trial 2. Bars represent mean height of plant. Groupings are based on LSD (5%) and are only within each trial.

Table 1. Descriptive statistics from Trial 1.

Variety	n	Mean	St. Dev.	Min.	Max.
Victory White	29	13.3	0.9	11.0	15.0
Cooler Coconut	30	18.0	3.1	13.0	22.5

Table 2. Descriptive statistics from Trial 2.

Variety	n	Mean	St. Dev.	Min.	Max.
Victory White	29	13.0	1.6	10.0	15.5
Cooler Coconut	28	19.4	1.7	16.0	22.5

Table 3. ANOVA results from Trials 1 and 2.

Trial	Type III SS	F Value	p Value
1	321.4	156.7	<0.0001
2	547.0	230.0	<0.0001

Table 4. Plant height (cm) from Trial 1 and Trial 2.

Trial 1		Trial 2	
Victory White	Cooler Coconut	Victory White	Cooler Coconut
12.1	21.5	11	19.5
13	21.5	11.5	22
14	20	14	18
12.5	20	12.8	22.5
12.5	19	11.2	21.5
13	21.5	13	17
14	20.5	13	21
11	22.5	13.5	19
13.5	22	12.2	20.5
14	21.5	15	20
13.5	19	14.5	21
12.8	21.5	13.5	21
12.3	21	12	19
12.3	20.1	13	19.5
12.1	20	10.5	21
14.1	14	12.5	19
13	18	13	20
13.5	16	13	18
12.5	16.8	11	17.5
13.8	14.5	10	16
13.5	16	11.1	17
14.6	13.5	15	19
15	13	15	20
13.1	14.5	15	18.5
15	13	14	19
13.5	15	15.5	17
13.3	15	14.5	22
14	17	15	19.5
13.5	16.2	.	17
.	15	.	.



Figure 2. Side-by-side comparison of Cooler Coconut and Victory White 12 weeks after sowing. Cooler Coconut is on the left, Victory White is on the right. Note the difference in height between the two varieties.

United States Department of Agriculture, Agricultural Marketing Service
Science and Technology Division, Plant Variety Protection Office
National Agricultural Library Building, Room 500
Beltsville MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
VINCA (*Catharanthus* spp.)

Name of Applicant(s) Sakata Seed Corporation	Temporary Designation <u>Kakegawa EP7</u>	Variety Name <u>Victory Pure White</u> Kakegawa EP7
Address (Street & No., or R.F.D. No., City, State, Zip Code and Country) 2-7-1 Nakamachidai Tsuzuki-Ku, Yokohama Japan 224		FOR OFFICIAL USE ONLY PVPO Number <u>200100124</u>

Place the appropriate number that describes the varietal characters typical of this variety in the spaces below. Right justify whole numbers by adding leading zeros if necessary. The variety that you choose for comparison should be the most similar one in terms of background and maturity. The comparison variety used should be grown in field trials with the application variety for 2-3 location/years (environments) in the region and season of best adaptability. At least one year of trials should be conducted within the United States of America. In general, measurements of quantitative traits should be taken on 15-25 randomly selected plants or plant parts to obtain averages and statistics that describe a typical field of the variety. Designate test location(s): Salinas, California

1. OVERALL PLANT HABIT (at flowering stage): Data Collection Site <u>Salinas, California</u> <input checked="" type="checkbox"/> Species: 1=roseus 2=Other _____ <input checked="" type="checkbox"/> Ploidy: 1=Haploid 2=Diploid 3=Triploid 4=Tetraploid <input checked="" type="checkbox"/> Life Cycle: 1=Annual 2=Biennial 3=Perennial <input checked="" type="checkbox"/> Growth Habit: 1=Determinate 2=Semi-determinate 3=Indeterminate <input checked="" type="checkbox"/> Growth Form: 1=Upright 2=Semi-prostrate 3=Prostrate <input checked="" type="checkbox"/> Flowering: 1=Very Early 2=Early 3=Mid Season 4=Late 5=Continuous <u>77</u> Days from Planting to First Flowering <u>150</u> Length of Flowering Season in Days <u>12.2</u> cm Plant Height at Maturity <u>16.0</u> cm Plant Width at Maturity <input checked="" type="checkbox"/> Plant Height Class: 1=Extra Dwarf 2=Dwarf 3=Semi-dwarf 4=Tall <input checked="" type="checkbox"/> Plant Width Class: 1=Compact 2=Semi-compact 3=Spreading/Lax		Comparison Variety Name <u>'COONER COCONUT'</u> <input checked="" type="checkbox"/> Species <input checked="" type="checkbox"/> Ploidy <input checked="" type="checkbox"/> Life Cycle <input checked="" type="checkbox"/> Growth Habit <input checked="" type="checkbox"/> Growth Form <input checked="" type="checkbox"/> Flowering season <u>50</u> Days to First Flowering <u>150</u> Days - Flowering Season Length <u>15.6</u> cm Plant Height <u>16.0</u> cm Plant Width <input checked="" type="checkbox"/> Plant Height Class <input checked="" type="checkbox"/> Plant Width Class	
2. STEM: <input checked="" type="checkbox"/> Profile: 1=Straight 2=Zig-Zag <input checked="" type="checkbox"/> Branching Pattern: 1=Single Stem 2=Few Branches 3=Many Branches <u>11.2</u> cm Stem Length from base of stem to terminal flower <u>0</u> Number of Internodes below First Branch <u>10</u> Number of First Order Branches (from main stem) <input checked="" type="checkbox"/> Stem Anthocyanin: 1=Absent 2=Along Veins only 3=Solid Coloration		<input checked="" type="checkbox"/> Profile <input checked="" type="checkbox"/> Branching Pattern <u>16.4</u> cm Stem Length (total) <u>0</u> Number of Internodes below First Branch <u>12</u> No. of First Order Branches (from main stem) <input checked="" type="checkbox"/> Stem Anthocyanin	
Application Variety Data		Comparison Variety Data	

JMS
8/12/02

Victory Pure White

200100124

Application Variety Data

'Kakegawa EP7'

Page 2

Comparison Variety Data

'Cooler Coconut'

3. FOLIAGE:

- 1 Leaf Type: 1=Simple 2=Compound
1 Leaf Margin: 1=Entire 2=Serrate 3=Other _____
1 Leaf Odor: 1=None 2=Mild 3=Strong
1 Petiole Anthocyanin: 1=Absent 2=Mild 3=Strong
2 Leaf Shape: 1=Lanceolate 2=Elliptic 3=Obovate 4=Ovate

38.0 mm Leaf Width

85.0 mm Leaf Length



LEAF DORSAL SIDE:

- 2 Leaf Color: 1=Light Green 2=Medium Green 3=Dark Green
4=Other (describe) _____

Color Chart Name RHS

Color Chart Reading 137B

- 1 Pubescence: 1=Absent 2=Light 3=Heavy

- 1 Luster: 1=Dull 2=Shiny

LEAF VENTRAL SIDE:

- 2 Leaf Color: 1=Light Green 2=Medium Green 3=Dark Green
4=Other (describe) _____

Color Chart Name RHS

Color Chart Reading 144A

- 2 Pubescence: 1=Absent 2=Light 3=Heavy

- 1 Luster: 1=Dull 2=Shiny

- 1 Leaf Type

- 1 Leaf Margin

- 1 Leaf Odor

- 1 Petiole Anthocyanin

- 2 Leaf Shape

41.0 mm Leaf Width

83.0 mm Leaf Length

LEAF DORSAL SIDE

- 2 Leaf Color

Color Chart Reading 137B

- 1 Pubescence

- 1 Luster

LEAF VENTRAL SIDE

- 2 Leaf Color

Color Chart Reading 144A

- 2 Pubescence

- 1 Luster

4. FLOWER:

- 1 Type: 1=Single 2=Semi-Double 3=Double
1 Form: 1=Flat 2=Cupped 3=Other _____
1 Shape: 1=Round (petals overlap) 2=Intermediate 3=Star (petals gapped)
1 Flower Odor: 1=None 2=Mild 3=Strong
1 Pedicel Anthocyanin: 1=Absent 2=Faint 3=Strong

25 Number Flowers per Plant

50.0 mm Flower Diameter

3.0 mm Orifice Size (including the opening of the corolla tube)

2.4 mm Ring Width (from outside orifice to edge of color band)

24.0 mm Petal Width (at widest point)

24.0 mm Petal Length (from ring to outer edge)

- 1 Type

- 1 Form

- 1 Shape

- 1 Flower Odor

- 1 Pedicel Anthocyanin

25 Number Flowers per Plant

44.0 mm Flower Diameter

3.0 mm Orifice Size

2.2 mm Ring Width

24.0 mm Petal Width

24.0 mm Petal Length

Application Variety Data

Comparison Variety Data

10

JMS
8/2/02

Victory Pure White

200100124

Application Variety Data

'Kakegawa EP7'

Page 3

Comparison Variety Data

'Cooler Coconut'

5. FLOWER COLORS : (Note: Common Color Charts: RHS=Royal Horticultural Society Colour Chart; Munsell=Munsell Book of Color)

	Color Verbal Name	Color Chart Code	Color Chart Name		Color Name	Chart Code	Chart Name
EXAMPLE	Light Blue	106C	RHS				
Petal Color	WHITE	155D		Petal Color	WHITE	155D	RHS
Ring Color	YELLOW	2B		Ring Color	YELLOW	2B	RHS
Orifice Color	YELLOW	2B		Orifice Color	YELLOW	2B	RHS
Other Color (describe location or placement)				Other			

6. SEEDS (Measure mature (dry) seeds):

5 Seed Set : 1=None 2=Poor 3=Fair 4=Good 5=Excellent

4 Seed Coat Color: 1=White 2=Tan 3=Brown 4=Black 5=Other _____

1000.0 mg Weight per 1000 Seeds

5 Seed Set

4 Seed Coat Color

1700.0 mg Seed Weight

7. RESISTANCE: Test as many disease and insect reactions as possible before applying for protection. Tests for disease and insect reactions should include a resistant check and a susceptible check for each disease or insect being tested. When using disease resistance to describe novelty, information on these checks should be included in the novelty statement in support of the novelty claim. Rate the application variety and the comparison variety on a scale of 1 (most susceptible) to 9 (most resistant) for each disease or insect reaction being reported. Give the scientific and common names of each disease/insect for completeness, and the race or strain, if known. (Rate from 1 (most susceptible) to 9 (most resistant)):

Rating Disease/Insect Name (give race or strain, if known)

_____	_____
_____	_____
_____	_____
_____	_____

Rating Disease/Insect Name

_____	_____
_____	_____
_____	_____
_____	_____

Application Variety Data

Comparison Variety Data

8.  ing the identity of each
var of the verbal descriptors
give

Kakegawa EP7 is
labeled Victory White
in this photo.

11

Exhibit D

PVP Appl. No. _____

Vinca Data - First Sowing - Plant Characteristics

Plant. No.	Kakegawa EP7 (cm.)			Cooler Coconut (cm.)		
	Plant Height	Leaf Width	No. Branches	Plant Height	Leaf Width	No. Branches
1	13.0	2.8	11.0	16.5	3.5	
2	13.0	2.8	7.0	17.0	4.4	
3	14.5	3.0	11.0	17.5	3.9	
4	14.0	3.2	9.0	16.0	4.5	
5	13.0	2.9	13.0	17.0	4.4	
6	11.5	3.0	10.0	18.0	4.0	
7	11.0	3.2	11.0	17.0	4.4	
8	11.0	2.3	8.0	16.0	3.8	
9	13.0	3.0	9.0	18.5	3.7	
10	14.0	2.6	9.0	17.5	4.2	
11	14.0	2.9	10.0	17.0	3.7	
12	12.0	2.7	11.0	17.0	4.1	
13	13.5	2.6	8.0	15.5	4.5	
14	12.0	3.1	12.0	16.0	4.3	
15	12.5	3.1	9.0	17.0	3.9	
16	13.0	3.1	8.0	16.0	4.2	
17	12.0	2.9	9.0	16.0	4.5	
18	13.5	3.4	6.0	14.0	4.7	
19	12.0	3.0	10.0	14.5	4.4	
20	11.5	2.3	11.0	15.5	3.8	
21	10.0	2.4	13.0	17.0	3.7	
22	10.5	2.7	10.0	18.0	3.7	
23	11.6	2.7	12.0	16.0	3.6	
24	10.0	2.5	10.0	15.0	4.0	
25	12.0	3.1	9.0	15.5	4.3	
26	11.0	2.8	10.0	13.5	4.1	
27	11.0	2.8	11.0	18.0	4.7	
28	12.5	3.1	10.0	15.5	4.5	
29	12.0	3.3	10.0	18.5	3.6	
30	11.0	3.3	10.0	16.0	4.2	
Count	30	30	30	30	30	
Average	12.2	2.9	9.9	16.4	4.1	
Std. Dev.	1.2196	0.2909	1.6049	1.2532	0.3527	

 $H: \text{mean}(EP7) = \text{mean}(\text{Cooler})$

	Plant Height	Leaf Width	No. Branches
df numerator	0.01038998	4.85451E-05	
df denominator	0.000179269	8.67232E-07	
degrees of freedom	57.957	55.977	
t stat	-13.251	-14.656	
Prob(T >t)	0.00000	0.00000	
Excel's Prob	0.00000	0.00000	

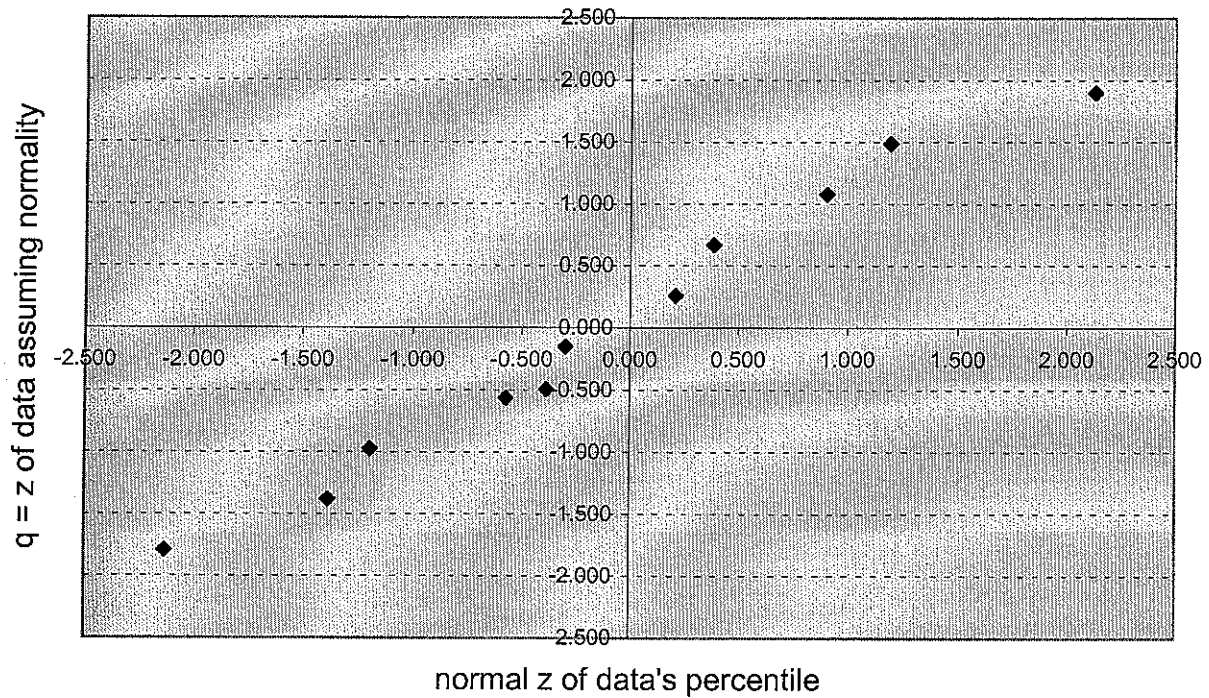
200100124

Quantile - Quantile Plot Calculations - First Sowing

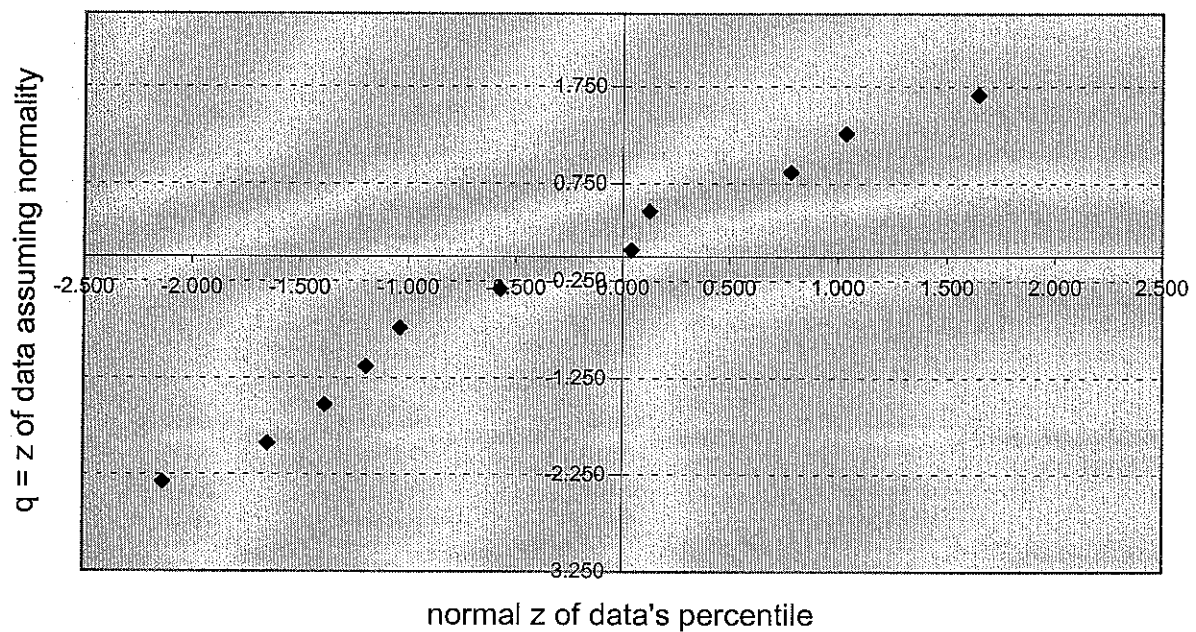
EP7 Plant Height					Cooler Plant Height				
Plant Height	Rank	percentile	z of p	z of data	Plant Height	Rank	percentile	z of p	z of data
10.0	1	0.017	-2.128	-1.792	13.5	1	0.017	-2.128	-2.327
10.0	1	0.017	-2.128	-1.792	14.0	2	0.050	-1.645	-1.928
10.5	3	0.083	-1.383	-1.382	14.5	3	0.083	-1.383	-1.529
11.0	4	0.117	-1.192	-0.972	15.0	4	0.117	-1.192	-1.130
11.0	4	0.117	-1.192	-0.972	15.5	5	0.150	-1.036	-0.731
11.0	4	0.117	-1.192	-0.972	15.5	5	0.150	-1.036	-0.731
11.0	4	0.117	-1.192	-0.972	15.5	5	0.150	-1.036	-0.731
11.0	4	0.117	-1.192	-0.972	15.5	5	0.150	-1.036	-0.731
11.5	9	0.283	-0.573	-0.562	16.0	9	0.283	-0.573	-0.332
11.5	9	0.283	-0.573	-0.562	16.0	9	0.283	-0.573	-0.332
11.6	11	0.350	-0.385	-0.497	16.0	9	0.283	-0.573	-0.332
12.0	12	0.383	-0.297	-0.153	16.0	9	0.283	-0.573	-0.332
12.0	12	0.383	-0.297	-0.153	16.0	9	0.283	-0.573	-0.332
12.0	12	0.383	-0.297	-0.153	16.0	9	0.283	-0.573	-0.332
12.0	12	0.383	-0.297	-0.153	16.0	9	0.283	-0.573	-0.332
12.0	12	0.383	-0.297	-0.153	16.5	16	0.517	0.042	0.066
12.0	12	0.383	-0.297	-0.153	17.0	17	0.550	0.126	0.465
12.5	18	0.583	0.210	0.257	17.0	17	0.550	0.126	0.465
12.5	18	0.583	0.210	0.257	17.0	17	0.550	0.126	0.465
13.0	20	0.650	0.385	0.667	17.0	17	0.550	0.126	0.465
13.0	20	0.650	0.385	0.667	17.0	17	0.550	0.126	0.465
13.0	20	0.650	0.385	0.667	17.0	17	0.550	0.126	0.465
13.0	20	0.650	0.385	0.667	17.0	17	0.550	0.126	0.465
13.0	20	0.650	0.385	0.667	17.5	24	0.783	0.784	0.864
13.5	25	0.817	0.903	1.077	17.5	24	0.783	0.784	0.864
13.5	25	0.817	0.903	1.077	18.0	26	0.850	1.036	1.263
14.0	27	0.883	1.192	1.487	18.0	26	0.850	1.036	1.263
14.0	27	0.883	1.192	1.487	18.0	26	0.850	1.036	1.263
14.0	27	0.883	1.192	1.487	18.5	29	0.950	1.645	1.662
14.5	30	0.983	2.128	1.897	18.5	29	0.950	1.645	1.662
12.2					16.4				
1.2196					1.2532				

First Sowing

Quantile - Quantile Plot of EP7 Plant Height



Quantile - Quantile Plot of Cooler Coconut Plant Height



Vinca Data - Second Sowing - Plant Characteristics

Plant. No.	Kakegawa EP7 (cm.)			Cooler Coconut (cm.)		
	Plant Height	Leaf Width	No. Branches	Plant Height	Leaf Width	No. Branches
1	13.0	5.1	10.0	15.0	4.2	
2	11.0	5.0	9.0	16.0	4.5	
3	12.5	5.0	11.0	12.0	3.9	
4	11.5	5.2	11.0	17.0	4.0	
5	12.0	4.6	11.0	15.0	4.5	
6	12.0	4.3	11.0	15.0	4.0	
7	16.0	4.5	11.0	15.5	3.8	
8	10.0	4.8	12.0	13.5	4.5	
9	10.5	5.0	11.0	17.0	4.7	
10	13.0	5.2	11.0	12.5	3.9	
11	13.0	4.6	11.0	17.0	4.2	
12	11.0	4.7	12.0	14.0	4.3	
13	15.5	4.6	12.0	15.0	4.5	
14	12.0	5.2	11.0	13.5	4.1	
15	12.0	5.3	12.0	16.0	3.7	
16	11.0	4.6	5.0	14.0	4.5	
17	14.0	4.0	8.0	16.0	3.9	
18	11.0	5.0	11.0	13.0	3.8	
19	13.5	4.9	10.0	15.0	4.4	
20	14.0	4.2	9.0	16.0	4.7	
21	11.5	5.3	9.0	14.0	3.9	
22	13.0	5.2	11.0	12.0	4.1	
23	12.5	5.1	9.0	15.5	4.0	
24	12.0	5.1	10.0	15.0	4.6	
25	13.0	4.6	9.0	17.0	4.2	
26	10.0	4.9	11.0	18.0	3.9	
27	13.0	5.0	11.0	14.0	4.2	
28	14.0	5.1	11.0	15.5	4.0	
29	10.0	4.1	12.0	17.5	3.8	
30	11.5	4.9	12.0	16.0	4.2	
Count	30	30	30	30	30	
Average	12.3	4.8	10.5	15.1	4.2	
Std. Dev.	1.5006	0.3586	1.5025	1.5925	0.2928	

$H: \text{mean}(EP7) = \text{mean}(\text{Cooler})$

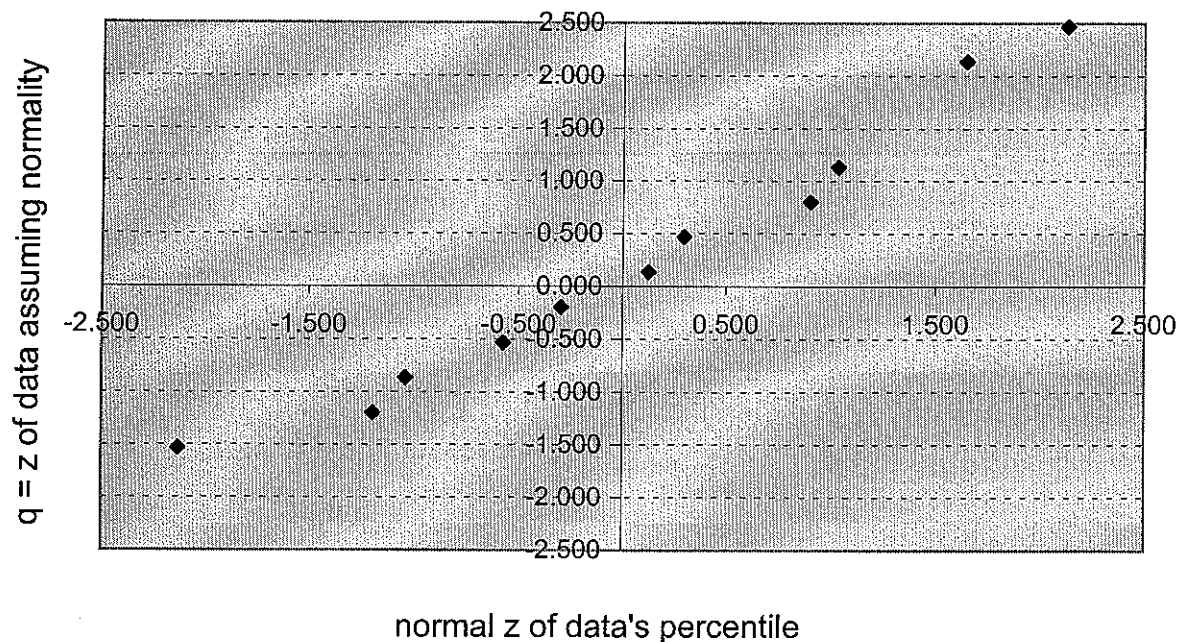
	Plant Height	Leaf Width	No. Branches
df numerator	0.025468369	5.1054E-05	
df denominator	0.000440657	9.15437E-07	
degrees of freedom	57.796	55.770	
t stat	-6.967	7.926	
Prob(T >t)	0.00000	0.00000	
Excel's Prob	0.00000	0.00000	

Quantile - Quantile Plot Calculations - Second Sowing

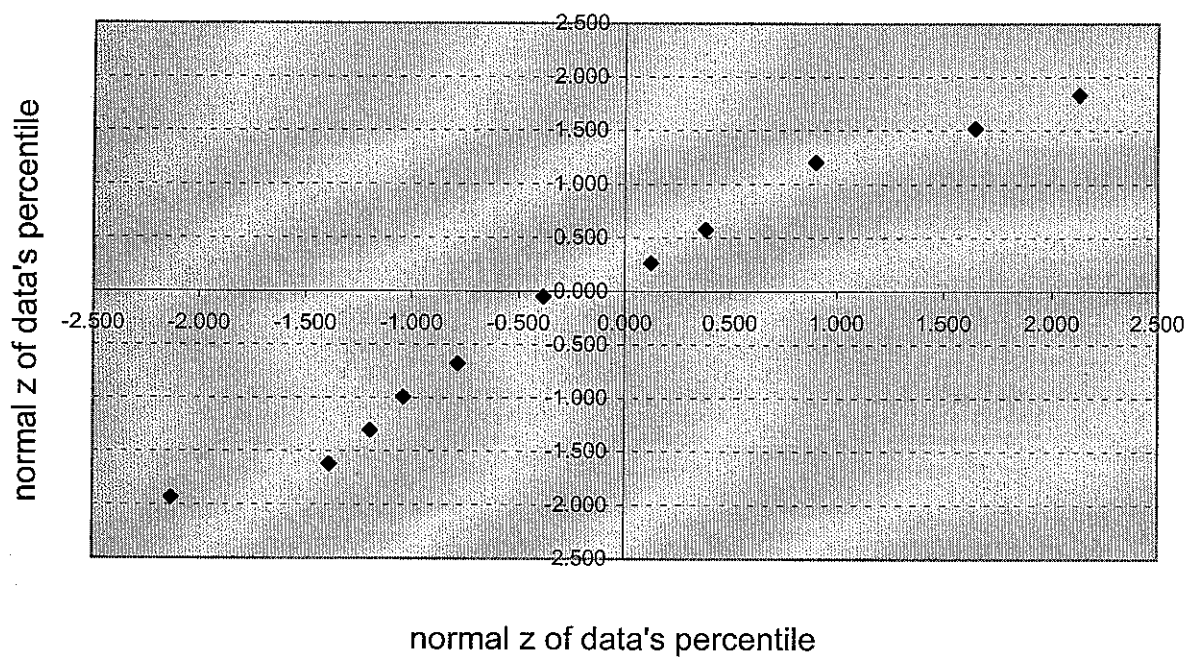
EP7 Plant Height					Cooler Plant Height				
Plant Height	Rank	percentile	z of p	z of data	Plant Height	Rank	percentile	z of p	z of data
10	1	0.017	-2.128	-1.533	12.0	1	0.017	-2.128	-1.936
10	1	0.017	-2.128	-1.533	12.0	1	0.017	-2.128	-1.936
10	1	0.017	-2.128	-1.533	12.5	3	0.083	-1.383	-1.622
10.5	4	0.117	-1.192	-1.200	13.0	4	0.117	-1.192	-1.308
11	5	0.150	-1.036	-0.866	13.5	5	0.150	-1.036	-0.994
11	5	0.150	-1.036	-0.866	13.5	5	0.150	-1.036	-0.994
11	5	0.150	-1.036	-0.866	14.0	7	0.217	-0.784	-0.680
11	5	0.150	-1.036	-0.866	14.0	7	0.217	-0.784	-0.680
11.5	9	0.283	-0.573	-0.533	14.0	7	0.217	-0.784	-0.680
11.5	9	0.283	-0.573	-0.533	14.0	7	0.217	-0.784	-0.680
11.5	9	0.283	-0.573	-0.533	15.0	11	0.350	-0.385	-0.052
12	12	0.383	-0.297	-0.200	15.0	11	0.350	-0.385	-0.052
12	12	0.383	-0.297	-0.200	15.0	11	0.350	-0.385	-0.052
12	12	0.383	-0.297	-0.200	15.0	11	0.350	-0.385	-0.052
12	12	0.383	-0.297	-0.200	15.0	11	0.350	-0.385	-0.052
12	12	0.383	-0.297	-0.200	15.0	11	0.350	-0.385	-0.052
12.5	17	0.550	0.126	0.133	15.5	17	0.550	0.126	0.262
12.5	17	0.550	0.126	0.133	15.5	17	0.550	0.126	0.262
13	19	0.617	0.297	0.466	15.5	17	0.550	0.126	0.262
13	19	0.617	0.297	0.466	16.0	20	0.650	0.385	0.576
13	19	0.617	0.297	0.466	16.0	20	0.650	0.385	0.576
13	19	0.617	0.297	0.466	16.0	20	0.650	0.385	0.576
13	19	0.617	0.297	0.466	16.0	20	0.650	0.385	0.576
13	19	0.617	0.297	0.466	16.0	20	0.650	0.385	0.576
13.5	25	0.817	0.903	0.800	17.0	25	0.817	0.903	1.204
14	26	0.850	1.036	1.133	17.0	25	0.817	0.903	1.204
14	26	0.850	1.036	1.133	17.0	25	0.817	0.903	1.204
14	26	0.850	1.036	1.133	17.0	25	0.817	0.903	1.204
15.5	29	0.950	1.645	2.133	17.5	29	0.950	1.645	1.518
16	30	0.983	2.128	2.466	18.0	30	0.983	2.128	1.832
12.3					15.1				
1.5006					1.5925				

Second Sowing

Quantile - Quantile Plot of EP7 Plant Height



Quantile - Quantile Plot of Cooler Coconut Plant Height



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) Sakata Seed Corporation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME 'Takegawa EP7'
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 2-7-1 Nakamachidai Tsuzuki-Ku, Yokohama Japan 224	5. TELEPHONE (Include area code) (408) 778-7758	6. FAX (Include area code) (408) 779-1978
7. PVPO NUMBER 200100124		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.

☒ YES☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.

☐ YES☒ NO
Japan

10. Is the applicant the original owner?

☒ YES☐ NOIf no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES☐ NO

If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES☐ NO

If no, give name of country

11. Additional explanation on ownership (If needed, use the reverse for extra space):

The breeder of the new variety is an employee of Sakata Seed Corporation. By agreement between the employee and Sakata, all rights to any invention are assigned to the company; therefore, ownership resides with Sakata Seed Corporation.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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